

## B205- Enabling Technologies: A Peek under the Hood, Part 2



**Aruna Anand**

Continental North America

Aruna Anand is Head of Segment 5, Connected Car Networking business unit for the North American region of Continental's Automotive Vehicle Networking and Information business area. She was appointed to this position effective January 1, 2021. In this role, Anand is responsible for all global Connected Car Networking business activities that support customers based out of North America. Previously, Anand was responsible for leading an independently operating business unit that offers comprehensive engineering services. Continental Engineering Services harnesses the extensive know-how and creativity of its engineers, combined with an access to Continental's entire technology pool, to provide innovative engineering solutions to external customers. In addition, it leverages its flexibility to transform mass production technology to apply to small series and niche applications at economical costs. Since joining the company in 1997, Anand has held numerous leadership positions across the different business areas of the Continental Automotive group sector. She was Head of Software for Gasoline Engine and Transmissions Systems for the Electronic Controls business unit within Vitesco Technologies, North America. She also led the Wireless Product Group Engineering within the Connected Car Networking business unit of Continental's Vehicle Networking and Information business area. Anand currently resides in Rochester, Michigan with her family.



**Robert Day**

Arm

Based in San Jose, California, Robert Day is the director of autonomous vehicles at Arm, responsible for the definition of Arm based solutions for the next generation of autonomous vehicle applications. In this role, Robert is dedicated to understanding the requirements for future autonomous innovation, and helping put together solutions and platforms to meet those requirements. By immersing himself in the autonomous vehicle world, he has accumulated a wealth of knowledge around the technology, issues and potential solutions that will make self-driving vehicles a reality. His passion for the safe deployment of autonomous vehicles has made him a popular speaker at automotive conferences worldwide, and even hosted a panel of autonomous experts at Arm's own TechCon conference where the reality of true autonomous vehicles was hotly debated. Prior to Arm, Robert was VP of Marketing at Lynx Software Technologies where he was responsible for the Lynx portfolio of safety and security solutions, focusing on avionics and automotive applications. Robert started his career as a SCADA engineer, and later wrote processor simulators for the popular XRAY debugger with Mentor Graphics. Robert has a BSc in Computer Science from the University of Brighton, UK.



**Robert Dingess**

Mercer Strategic Alliance

Robert N. Dingess has 25 years of public policy, legislative and association experience. A leading expert on traffic safety infrastructure policy, he has spent the last decade focused on driving automation system technologies' transformative potential. He currently chairs the pavement marking committee for the American Traffic Safety Services Association (ATSSA) and serves on several infrastructure and automotive industry technical committees. As the founding CEO of the Geospatial Transportation Mapping Association (GTMA), he focused the organization's attention on recognizing the potential transformative impact of the first generation of mobile LiDAR technologies. He has spent the last seven years working to bridge the gap between the

automotive and road infrastructure industries in support of driving automation system technologies. Mr. Dingess has a B.S. degree in Political Science from Brigham Young University and a Masters in Transportation Policy, Operations and Logistics from George Mason University.



**Dominique Freckmann**

TE Automotive

Dr. Dominique Freckmann leads TE Automotive's Global Technology efforts which includes the product/ technology/ manufacturing roadmapping process for the Automotive business unit as well as identifying new trends, anticipating the evolving needs of innovative players in the areas of Autonomous Driving, Connected Car, and E-Mobility, and supporting early engagements with TE's highly engineered connector and sensor solutions. Prior to her global assignment, she established and lead TE Automotive's Silicon Valley Tech Office which continues to serve the local automotive and transportation industry with TE's technologies. Dr. Freckmann started her career by conducting material science research for more than a decade in areas such as lightweighting, printed electronics, aerospace, and RF materials. She graduated with a Ph.D. in chemistry from the Technical University of Berlin, Germany; has authored and contributed to more than a dozen peer-reviewed scientific publications; and holds several patents related to materials and manufacturing processes for electronics applications.



**Dima Kislovskiy**

Aurora

Dima Kislovskiy is the Head of Product Integration at Aurora, the company delivering the benefits of self-driving technology safely, quickly, and broadly. In his current role, he and his team are responsible for the successful delivery of a capable and fully integrated self-driving system. Prior to joining Aurora, he was at Uber's Advanced Technologies Group (ATG) where he oversaw technical aspects of Uber's self-driving car program. He was also the CEO and co-founder at Augary, an automotive safety computer vision company that specialized in ADAS for low-power and embedded devices. Before Augary, he was a tech lead and trader at Vegasoul Capital Management, a hedge fund specializing in algorithmic futures and FX trading. Dima graduated from Columbia University with a degree in Operations Research.



**Matti Kutila**

VTT

Dr. Matti Kutila is 46 years and he is leading the team which focused on developing and testing automated driving functions, connectivity and sensing sub-systems. He started working for VTT in 1998, first as a researcher and later as a Project Manager of the automotive industry related R&D projects. He obtained Master of Science degree in 2000 and completed his driver monitoring and neural networks related doctoral thesis in 2006. Recent years his expertise fields have been focused on automotive sensors, V2X technologies, sensor data fusion and automated driving functions. He has prepared about 40 peer-reviewed scientific articles related to the connected and automated driving and holds 5 patent applications in his expertise fields.

**Olav Madland**

Applied Autonomy, Norway

Olav Madland is responsible for the coordination of the National Testarena in Kongsberg regarding autonomous transport integrated with Public Transport. The test arena is integrated with the municipality, county administration and NRPA. Olav has an Honours degree within Information Technology, Statistics and Administration from the University of Bergen (1989), and followed by a series of business management courses from Europe's prestigious and leading business school INSEAD (1999), in Paris, France. His background is a balanced mix of management roles within the telecom, banking and finance sectors, involving the issuing of credit cards, acquisition and settlement of transactions. Olav has 10 years of experience in R&D from Telenor (1988-1998), Telia Sonera (2000-2002) and Alcatel (1998-2000), both as a manager and as director.

**Manuela Midl**

TTTech Auto

As a Manager of Advanced Projects at TTTech Auto, Manuela Midl is responsible for technical project management as well as for business development in the USA, primarily in Silicon Valley. Manuela is an expert in the integration of driver assistance functions onto the MotionWise platform as well as system integration into the vehicle for production programs. Her main focus is on the execution of next generation ADAS programs.

**Youval Nehmadi**

LeddarTech

Youval Nehmadi, Engineering Director, Sensor Fusion & Perception: Youval Nehmadi has over 25 years of experience in the high-tech industry, including in applied materials, algorithms, computer vision, deep neural networks, and business development in both large enterprises and startups. Youval holds a PhD in 3D sensor fusion for autonomous vehicles and an EMBA from Kellogg-Recanati of Tel Aviv University, and is the owner of more than twenty patents. In January 2016, along with Ronny Cohen, Youval co-founded VayaVision, a sensor fusion and perception software company focusing on the autonomous driving market. VayaVision developed an innovative patented technology that enables best-in-class sensing with added-value cognition abilities at an affordable price. In July of 2020, VayaVision was acquired by LeddarTech, a global leader in Level 1-5 ADAS and AD environmental sensing technology.

**Paul Perrone**

Perrone Robotics

Paul is founder & CEO of Perrone Robotics. He is the inventor of "MAX", the world's first general-purpose robotics operating system for autonomous vehicles along with novel claims in robotics and AV safety approaches (patented in 2006). He's been an early pioneer in the autonomous vehicle space leading Perrone Robotics for over 17 years in pioneering showcase achievements such as leading a team in the 2005/2007 DARPA Grand Challenges (autonomous vehicle races), early work with rocker Neil Young on vehicle automation, and creating rapid one-day drop-in autonomy solutions. He spearheaded the Company's Series A capital raise in 2016 (Intel Capital leading) and has continued to lead the company during its acquisition of flagship Fortune 500 customers including an automotive OEM, tier 1 automotive supplier,



industrial equipment OEM, personal computer OEM, and automotive channel partner. He's currently leading the company's commercial deployment of autonomous shuttles for the transit of people and things via Perrone Robotics' "TONY" autonomous shuttle technology. He has 17+ years autonomous vehicle experience and 25+ years total hi-tech industry experience. His blend of experiences lies in the development of high-tech, business, and operations.



**Chuck Price**

TuSimple

Chuck currently serves as Chief Product Officer for TuSimple. Prior to joining TuSimple, Chuck Price currently serves as Chief Product Officer for TuSimple. Prior to joining TuSimple, Chuck led engineering and technical operations at Peloton Technology. Before entering the world of truck automation, Chuck served as VP of Development at Oracle, VP Engineering at Active Reasoning, and SVP at Hotjobs.com. Chuck holds more than 10 patents in software technologies, including fundamental patents in connected vehicle technologies and platooning, electronic commerce, cyber-security, and cloud infrastructure management.



**Sabbir Rangwala**

Patience Consulting

Sabbir is an optics veteran with 30 years experience in telecom optics, quantum detectors, optical sensors, movement automation, perception and LiDAR. He is a regular contributor to Forbes where he concentrates on LiDAR and other sensors for autonomous driving and ADAS. He currently heads up Patience Consulting, which provides customers with expertise in areas of sensing, perception and robotics. He is passionate about cars (human and autonomous). Prior to this, he led Princeton Lightwave as President, pioneering the development of 1550 nm LIDAR. The company was sold to Argo.ai in 2017. Prior to this, he held leadership roles at JDS Uniphase and AT&T Bell Labs, primarily in optics based product developments. He has a Ph.D. from the University of California at Berkeley.



**Valentin Scinteie**

Kontron Transportation

After more than 20 years in the transportation and security industries with Alstom Transport and Genetec respectively, Valentin joined his current employer Kontron Transportation in 2014. Valentin holds a Bachelor's degree in Electrical Engineering from McGill University, Montreal, and a MBA degree in International Business from l'École des hautes études commerciales (HEC), Montreal. In his current position, Valentin is responsible for product market alignment and business development of Kontron's next generation transportation "Autonomous Anywhere" rugged Intelligent Vehicle Computers (IVCs) and IoT (Internet of Things) ready gateways for onboard and smart city applications. Valentin also chairs the TVAC (Technologies for Vehicle Automation and Connectivity) APTA (American Public Transit Association) Subcommittee and the TRB ARTS (Automated Road Transportation Symposium) Enabling Technologies Breakout Sessions. Valentin is a regular blogger and moderator/speaker at conferences on the topics of Autonomous Vehicles (AVs), IoT and Emerging Public Transportation Technologies.



**Tom Toma**

Arriver

Tom Toma serves as the Head of Arriver's Sales and Product area. In this role, Toma is responsible for strategy and new business pursuit of advanced driver assistance system software. He has experience in leading teams to develop and launch advanced features based on cameras and also combined with other sensors. Toma is passionate about his work in the automotive industry, where he is part of bringing new systems and functionalities to drivers. Toma holds multiple patents in three vehicle vision system inventions. He is also a 2017 Automotive News Rising Stars honoree, which recognizes

young and gifted upper-level management in the automotive industry.



**Tom Tomazin**

NVIDIA

Tom Tomazin currently serves as senior director of SoC product architecture at NVIDIA. Before joining NVIDIA in 2011, he held a number of engineering and management roles at MediaTek, Analog Devices and Motorola. In all, Tomazin has more than 30 years of industry experience, specializing in complex SoC and system definition across multiple markets, including cell phones, tablets, automotive infotainment, ADAS and self-driving car technology. Tomazin holds a bachelor's degree in electrical engineering from the University of Illinois at Urbana-Champaign and a master's degree in engineering

management from the University of Texas at Austin.